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NOTES AND NEWS

TWO NEW SPECIES OF TRAGOPOGON FOR ARIZONA.—*Tragopogon mirus* and *Tragopogon miscellus* (Compositae) were first described by Dr. Marion Ownbey from southeastern Washington. Both species are amphidiploids, $n = 12$, resulting from the following hybridizations: *T. mirus* (*T. dubius* Scop., $n = 6 \times T. porrifolius L., $n = 6$) and *T. miscellus* (*T. dubius* Scop., $n = 6 \times T. pratensis L., $n = 6$) (M. Ownbey, *Amer. Journ. Bot.* 37:487-499. 1950). The amphidiploid plants are easily distinguished from the diploid parents in the field by their robust nature, expressed particularly in the size of the mature achenes. The tetraploids were previously known only from eastern Washington and areas of Idaho. Recent collections of *T. mirus* (442) and *T. miscellus* (479) were made by Schaack in 1970, near Flagstaff, Coconino County, Arizona (DHA; WS). Examination and counts of chromosomes were made from pollen mother cells using the aceto-carmin squash technique. Specimens of *T. mirus* have been verified by Dr. Marion Ownbey, while *T. miscellus* was given tentative identification. *Tragopogon mirus* is well represented in the Flagstaff area; its numbers often exceed those of the parent species in many populations. *Tragopogon miscellus* is known from only two plants in the Flagstaff area. Three species (*T. dubius*, *T. pratensis*, and *T. porrifolius*) were previously known for Arizona. The addition of two tetraploid species complicates the identification of the Arizona *Tragopogon* using available regional floras. A key contributed by Ownbey (C. L. Hitchcock et al., *Vasc. Pl. N.W.* 5:327-330. 1955) should be useful in identification of the Arizona specimens. It is our belief that the occurrence of *T. mirus* and *T. miscellus* in northern Arizona represents an independent origin rather than an extension in range. Thanks are extended to Dr. Marion Ownbey for verification of our specimens and for valuable information.—ROY C. BROWN and CLARK G. SCHAACK, Department of Biological Science, Northern Arizona University, Flagstaff 86001.$$